New Permit Review for Unclassified Waters by Standards Imp. Team

Name: City of Dripping Springs
Number: 14488-003
County: Hays
Region: 11
Basin: Colorado
Date Application Received: 10/20/15

1. Segment in Which Discharge is Located: 1427-Onion Creek

2. Designated Uses and Pertinent Criteria: PCR, PS/AP, H, D.O.=5.0 mg/L
AP does apply; discharge is in the Contributing Zone and approximately 19.4 miles to recharge zone.

3. Unclassified Receiving Water Characteristics: Walnut Springs>~0.4 mi.>Caliterra Pond (impoundment on Onion Creek)>1427

Walnut Springs is a spring-fed tributary with numerous impoundments upstream; it appears that the flow may be intermittent as the hydrology is overflow from the upstream impoundment. There is a rock dam at the confluence with Onion Creek. Onion Creek is perennial and has numerous on-channel impoundments.

4. Additional Comments: initial=0.399 MGD, interim=0.4975 MGD, final=0.995 MGD.

5. Recommended Receiving Water Uses and Associated Criteria:

Stream name	Stream Order	Aq. Life Use	DO	AL Criteria		HH Criteria		
				Acute	Chron.	Incid.	Sustain.	HH-PS+ Fish
Walnut Springs	2	M	2	X				
Onion Creek		H	5	X	X			X

6. Antidegradation Review: The discharge for this facility is into Walnut Springs, which is spring-fed, and Onion Creek, which falls under the Colorado Watershed Rule (30 Texas Administrative Code Chapter 311) and the Edwards Aquifer Rule (30 Texas Administrative Code Chapter 213).
Tier I: sulfate is currently on the 2014 303 (d) list for Segment 1427-Onion Creek. Effluent sulfate screening met criteria for Aquifer Protection.
Tier II: Narrative nutrient screening indicated a total phosphorus limit is required. Median background concentrations recorded at SWQM monitoring stations on Onion Creek for upstream @SWQM monitoring station 12454 (n=13) was 0.01 mg/L TP and downstream @SWQM monitoring station 12455(n=10) was 0.02 mg/L TP. In a USGS report on the *Nutrient and Biological Conditions of Selected Small Streams in the Edwards Plateau, Central Texas* (2005-2006) in cooperation with the TCEQ, mean measured concentrations from least disturbed streams in the Edwards Plateau are 0.003 mg/L total phosphorus and 0.265 mg/L nitrogen.
Due to the high clarity of the water column, lack of shade along the banks, and minimal dilution, a total phosphorus limit of 0.15 mg/L is proposed to protect Onion Creek from accumulation of excessive algae.

Request Textox screening for nitrates to ensure public water supply and aquifer protection meet drinking water standard of 10 mg/L N-NO3.

7. Endangered species: Barton Springs salamander in segment 1427 and Hays Co.

San Marcos Salamander (*Eurycea* nana), Texas Blind Salamander (*Eurycea* (Typhlomolge) rathbuni)), Comal Springs dryopid beetle (*Stygoparnus* comalensis), Fountain Darter (*Etheostoma* fonticola), San Marcos Gambusia (*Gambusia* georgei), San Marcos Salamander (*Eurycea* nana), Texas wild-rice (*Zizania* texana), and Comal Springs riffle beetle (*Heterelmis* comalensis) are in Hays County, but not the segment.

Signature: _____

Lili Murphy

Date:

Peer reviewer, fill in the bold columns. Standards reviewer, fill in the non-bold columns.

Date to Peer Reviewer (PR)	**PR initials**	**Date to SR for reevaluation**	Date to PR for Final Review	**Date to SR for Finalization**	Date to Crit Conditions

RE-EVALUATION COMMENTS